

REMARKS

Claims 1-10 are pending in the application.

The Office Action objects to the title as being non-descriptive. The title is amended to more specifically describe the invention as claimed. Applicants respectfully request withdrawal of the objection to the title.

The Office Action indicates that the new drawings are approved and requires that final drawings be submitted with this response. Applicants previously submitted final drawings with a response dated September 24, 2004. A copy of the final drawings, specifically Figs. 1-3, is enclosed with the present response for the convenience of the Office.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,900,954 to Katz et al, hereinafter "Katz". Applicants respectfully traverse this rejection.

Claim 1 provides an information carrying device comprising a carrier with at least one external surface for the readout of optically readable information, a transparent film for copy protection with a property that rotates the polarization of the readout light is introduced onto the at least one external surface. The optically readable information contains holographically recorded information, and the copy-protection film includes surface segments of different polarization-rotating properties including rotating by about 45°. The surface segments, viewed together, show an information pattern that contains coded information, at least in part, and the optically readable information on the information carrier also contains coded information, at least in part. The coded information of the copy-protection film comprises a decoding key for the coded information of the information carrier for visibly decoding the information on the information carrier, or vice versa.

Katz discloses a record carrier 100, e.g., a credit card, including a machine-readable indicia 106 such as a bar code that partially overlays a reflective surface hologram 104 (col. 5, lines 56-63). The bar code can be applied to the surface of the record carrier by conventional printing techniques to provide regions of different reflectivity (col. 5, lines 65-67). That portion of the bar code on the hologram can be applied by conventional printing techniques on the top surface of the hologram or on the surface of the record carrier beneath the hologram (col. 6, lines 1-4). Alternatively, the portion of the bar code on the hologram can be formed by variations in reflectivity in the surface of the hologram (col. 6, lines 5-8). The two-dimensional bar code structure can be encrypted, wholly or partially, using well known encryption techniques in which, for example, an encryption key is necessary for de-encryption (col. 6, lines 38-41).

Katz discloses a bar code, overlaying a hologram, that provides regions of different **reflectivity**. However, Katz does not disclose that the bar code acts to rotate the polarization of light that enters through the bar code. In contrast, claim 1 provides a transparent film that **rotates the polarization** of light reflecting from a surface. This has the effect of rotating the readout light reflected by a hologram back through the transparent film, and hinders a constructive interference with reference light that, along with the readout light, must be used for copying the hologram inside the information carrier.

Furthermore, although Katz discloses that the bar code can be encrypted, Katz discloses only known encryption techniques, in which decoding keys are stored on information carriers and read by a separate decoding machine. In contrast, claim 1 provides a decoding key for **visibly decoding the information** on the information carrier or the copy-protection film. The invention provided in claim 1 provides that the key decodes the underlying coded information so that the coded information may be visibly recognized by simply looking onto the outer surface of the copy-protection film. Thus, decoding of the coded information inside the information carrier takes place directly on the information carrying device without the additional use of any decoding

machine, unlike Katz which requires that the bar code be read by machine.

Because Katz does not disclose rotating the polarization of light, Katz does not disclose or suggest "a transparent film for copy protection, with a property that rotates the polarization of the readout light on the at-least one external surface . . ." or "wherein the copy-protection film includes surface segments of different polarization-rotating properties including rotating by approximately 45°," as recited in claim 1. Also, because Katz discloses bar codes that must be read by a separate machine, Katz does not disclose "wherein the coded information of the copy-protection film comprises a decoding key for the coded information of the information carrier for visibly decoding the information on the information carrier, or vice versa," as recited in claim 1.

Thus, Katz fails to disclose or suggest the elements of claim 1. Therefore, claim 1 is patentable over Katz.

Claim 2 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 2 is patentable over Katz.

For the reasons set forth above, the rejection of claims 1 and 2 under 35 U.S.C. 102(b) as anticipated by Katz is overcome. Applicants respectfully request that the 102 rejection of claims 1 and 2 be reconsidered and withdrawn.

Claims 1 and 2 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of U.S. Patent No. 6,317,226 to Yeh et al., hereinafter "Yeh". Applicants respectfully traverse this rejection.

As discussed above, Katz does not disclose or suggest "a transparent film for copy protection, with a property that rotates the polarization of the readout light on the at-least one external surface . . .", "wherein the copy-protection film includes surface segments of different polarization-rotating properties including rotating by approximately 45°," or "wherein the coded information of the copy-protection film comprises a

decoding key for the coded information of the information carrier for visibly decoding the information on the information carrier, or vice versa," as recited in claim 1.

Yeh discloses a dot matrix hologram that generates a moire pattern (col. 2, lines 23-24). An upper decoding layer is formed by interlacing transparent areas and opaque areas, and a lower layer is formed by interlacing bright areas and dark areas and is called an encoded pattern (col. 2, lines 25-29). Although, the patterns of the decoding film of upper layer and the encoded pattern of lower layer may be any periodical patterns, the upper decoding pattern 3 (as shown in FIG. 3) usually is a periodically binary straight line family with transparent lines and opaque lines being interlaced periodically (col. 2, lines 38-43).

Yeh fails to make up for the deficiencies of Katz, as they apply to claim 1. Yeh discloses a moire pattern of period transparent and opaque regions. However, Yeh does not disclose **rotating the polarization** of light that enters through the moire pattern layers. Thus, Yeh does not disclose or suggest "a transparent film for copy protection, with a property that rotates the polarization of the readout light on the at-least one external surface . . ." or "wherein the copy-protection film includes surface segments of different polarization-rotating properties including rotating by approximately 45°," as recited in claim 1.

Neither Katz nor Yeh discloses "a transparent film for copy protection, with a property that rotates the polarization of the readout light on the at-least one external surface . . ." or "wherein the copy-protection film includes surface segments of different polarization-rotating properties including rotating by approximately 45°," as recited in claim 1. Therefore, neither Katz nor Yeh, whether considered separately or in combination, disclose or suggest the elements of claim 1. Thus, claim 1 is patentable over the cited combination of Katz and Yeh.

Claim 2 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 2 is patentable over the cited combination

of Katz and Yeh.

For the reasons set forth above, it is submitted that the rejection of claims 1 and 2 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh is overcome. Applicants respectfully request that the 103 rejection of claims 1 and 2 be reconsidered and withdrawn.

Claims 3, 4, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh, and further in view of U.S. Patent No. 3,836,754 to Toye et al., hereinafter "Toye". Applicants respectfully traverse this rejection.

As discussed above, neither Katz nor Yeh, whether considered separately or in combination, disclose or suggest the elements of claim 1. Applicants do not believe that Toye makes up for the deficiencies of Katz and Yeh, as they apply to claim 1. Therefore, Applicants submit that claim 1 is patentable over the cited combination of Katz, Yeh and Toye.

Claims 3, 4, 5 and 9 depend from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claims 3, 4, 5 and 9 are patentable over the cited combination of Katz, Yeh and Toye.

For the reasons set forth above, it is submitted that the rejection of claims 3, 4, 5 and 9 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh and Toye is overcome. Applicants respectfully request that the rejection of claims 3, 4, 5 and 9 be reconsidered and withdrawn.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh, and further in view of U.S. Patent No. 4,982,073 to Stenzel, hereinafter "Stenzel". Applicants respectfully traverse this rejection.

As discussed above, neither Katz nor Yeh, whether considered separately or in

combination, disclose or suggest the elements of claim 1. Applicants do not believe that Stenzel makes up for the deficiencies of Katz and Yeh, as they apply to claim 1. Therefore, Applicants submit that claim 1 is patentable over the cited combination of Katz, Yeh and Stenzel.

Claim 6 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 6 is patentable over the cited combination of Katz, Yeh and Stenzel.

For the reasons set forth above, it is submitted that the rejection of claim 6 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh and Stenzel is overcome. Applicants respectfully request that the rejection of claim 6 be reconsidered and withdrawn.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh, and further in view of U.S. Patent No. 4,820,912 to Samyn, hereinafter "Samyn". Applicants respectfully traverse this rejection.

As discussed above, neither Katz nor Yeh, whether considered separately or in combination, disclose or suggest the elements of claim 1. Applicants do not believe that Samyn makes up for the deficiencies of Katz and Yeh, as they apply to claim 1. Therefore, Applicants submit that claim 1 is patentable over the cited combination of Katz, Yeh and Samyn.

Claim 7 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 7 is patentable over the cited combination of Katz, Yeh and Samyn.

For the reasons set forth above, it is submitted that the rejection of claim 7 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh and Samyn is overcome. Applicants respectfully request that the rejection of claim 7 be reconsidered

and withdrawn.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh, and further in view of U.S. Patent No. 5,11,033 to Fujita et al., hereinafter "Fujita". Applicants respectfully traverse this rejection.

As discussed above, neither Katz nor Yeh, whether considered separately or in combination, disclose or suggest the elements of claim 1. Applicants do not believe that Fujita makes up for the deficiencies of Katz and Yeh, as they apply to claim 1. Therefore, Applicants submit that claim 1 is patentable over the cited combination of Katz, Yeh and Fujita.

Claim 8 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 8 is patentable over the cited combination of Katz, Yeh and Fujita.

For the reasons set forth above, it is submitted that the rejection of claim 8 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh and Fujita is overcome. Applicants respectfully request that the rejection of claim 8 be reconsidered and withdrawn.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh, and further in view of U.S. Patent No. 6,164,548 to Curiel, hereinafter "Curiel". Applicants respectfully traverse this rejection.

As discussed above, neither Katz nor Yeh, whether considered separately or in combination, disclose or suggest the elements of claim 1. Applicants do not believe that Curiel makes up for the deficiencies of Katz and Yeh, as they apply to claim 1. Therefore, Applicants submit that claim 1 is patentable over the cited combination of Katz, Yeh and Curiel.

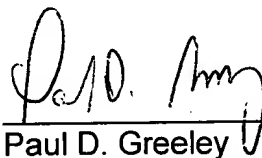
Claim 10 depends from claim 1. For at least reasoning similar to that provided in support of the patentability of claim 1, claim 10 is patentable over the cited combination of Katz, Yeh and Curiel.

For the reasons set forth above, it is submitted that the rejection of claim 10 under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Yeh and Curiel is overcome. Applicants respectfully request that the rejection of claim 10 be reconsidered and withdrawn.

An indication of the allowability of all pending claims by issuance of a Notice of Allowability is earnestly solicited.

Respectfully submitted,

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